

of the presently named inventors (Abdul Malik) as well as another (James D. Hayes), having a publication date of July 18, 1997.

The present patent application, as stated under "Cross Reference to Related Applications," claims benefit of priority under 35 U.S.C. 371, of PCT/US99/19113, filed August 20, 1999 which claims benefit of priority under 35 U.S.C. 119(e), of U.S. Provisional Application Serial No. 60/102,483, filed September 30, 1998, and U.S. Provisional Application Serial No. 60/097,382, filed August 21, 1998. Thus, in accordance with 35 U.S.C. 102(b), the priority dates of September 30, 1998 and August 21, 1998 were within one year of the publication date of Wang on November 15, 1997.

The Court of Appeals for the Federal Circuit has consistently held that "obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination." Smith Kline Diagnostics, Inc. v. Helena Laboratories Corp., 859 F.2d 878, 887, 8 U.S.P.Q.2d 1468, 1475 (Fed. Cir. 1988). For an invention to be deemed obvious, the relevant prior art must suggest the desirability of making the claimed invention. Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1143, 227 U.S.P.Q. 543, 551 (Fed. Cir. 1985). Here, in view of the relevant art, there is no suggestion of the desirability of making the claimed invention.

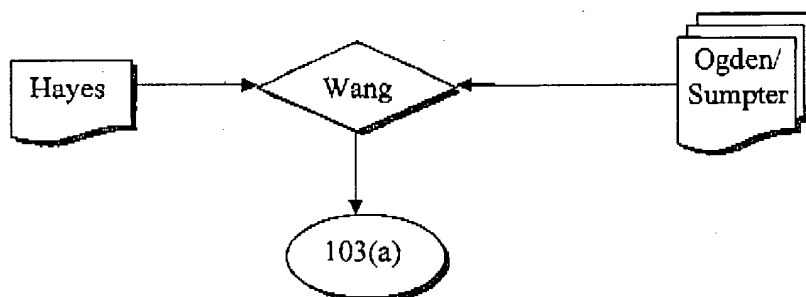
The final Examiner's Action, mailed January 5, 2004, states in part:

It would have been obvious to one of ordinary skill *at the time the invention was made* to incorporate the hydrothermal treatment of Ogden or Sumpter into the methods of Wang or Hayes because of the recognized problem in surface coverage during the deactivation step and the ability of the hydrothermal treatment to standardize the silanol concentration and distribution *as taught by Wang* for the Sumpter hydrothermal treatment and allow complete deactivation of the surface as taught by Ogden. (emphasis added) Examiner's Action page 5, lines 4-9.

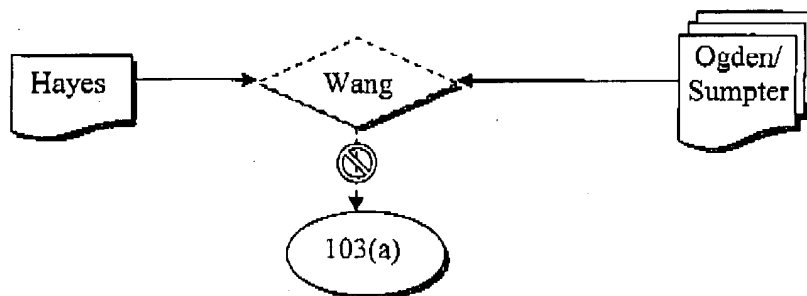
The Office further relies on Wang as the motivation for combining the references, citing:

Wang discusses the criticality of the deactivation step and notes that fused silica capillaries from different batches may not produce identical surface characteristics due to differences in their silanol content based on storage and handling conditions which causes problems with deactivation reproducibility. Wang teaches that others (Sumpter cited, reference 15) have used hydrothermal treatments to standardize the silanol concentration and distributions over the capillary surface. Wang elected not to do a hydrothermal treatment because of the added time to the column making procedure. Examiner's Action page 3, lines 13-19.

The obviousness rejection raised by the office can be graphically demonstrated as follows:



Wang simply cannot provide the motivation to combine the Hayes, Ogden, and Sumpter references since Wang does not qualify as prior art. As previously stated, under 35 U.S.C. 102(b), the priority dates of September 30, 1998 and August 21, 1998 were within one year of the publication date of Wang on November 15, 1997. Without Wang the chain is broken since there is no motivation for combining the references since none of the remaining references teach, disclose, or suggest the combination of a hydrothermal treatment to the remaining prior art.



Using the Office's own recitation of the factual inquiries set forth in *Graham v. John Deere, Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. §103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating the obviousness or non obviousness.

Here, the obviousness analysis breaks down in element number 1. Wang does not fall within the scope of the prior art. Since §103(a) specifically requires an obviousness determination be made from the prior art *at the time the invention was made*, Hayes does not teach, suggest or describe a hydrothermal treatment (as recognized by the office), and Wang does not qualify as prior art, withdrawal of the rejection is respectfully requested.

Applicants have provided herein, in accordance with 37 C.F.R. 1.131 a declaration stating that the cited reference was Applicants' own work, which was invented and reduced to practice prior to the publication dates of the Wang reference. Applicants also declare that the other authors (Sau L. Chong, and James D. Hayes) of the cited references were merely working under the direction of the applicants (See MPEP 715.02). The claimed subject matter is the invention of the named Applicants in this application. Thus, the cited references are improper as prior art, and withdrawal of the rejection is respectfully requested.

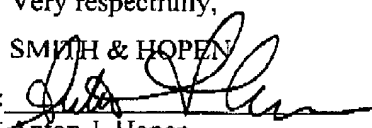
#### Conclusion

Entry of a Notice of Allowance is solicited. If the Office is not fully persuaded as to the merits of Applicant's position, or if an Examiner's Amendment would place the pending claims in condition for allowance, a telephone call to the undersigned at (727) 507-8558 is requested.

Very respectfully,

SMITH & HOPEN

By:

  
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Dated: March 22, 2004

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CERTIFICATE OF FACSIMILE TRANSMISSION  
(37 C.F.R. 1.8(a))

I HEREBY CERTIFY that this Amendment AF is being transmitted by facsimile to the United States Patent and Trademark Office, Art Unit 1743, Attn.: Arlen Soderquist, (703) 872-9311 on March 22, 2004.

Dated: March 22, 2004

  
Shelley Butz